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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,565	12/04/2003	Hiroyuki Nishimori	0229-0784P	5477
2292	7590	09/06/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			JULES, FRANTZ F	
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FALLS CHURCH, VA 22040-0747			PAPER NUMBER	
			3617	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,565

Applicant(s)

NISHIMORI, HIROYUKI

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7-9, 11-13, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 5-6, 10, 14-15, 17, 19-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.



DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 9, 11-13, 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daisei et al (JP 06 255 316 A) in view of Bridgstone (JP 2003-1167). Daisei et al disclose an ATV radial tire of a block pattern in which a plurality of blocks (3a, 3b, 3c, 3d) are disposed on a tread surface at distances from one another, wherein said blocks includes a chamfered block (3b or 3c or 3d) as shown in figs. 1-2, said chamfered block including a notch identified by r1 or r2 which comprises an inclined surface obtained by chamfering a corner between an upper surface of the block and a wall surface of the block on an outer side edge of the block which is directed outward of a vehicle when the tire is mounted on the vehicle, see abstract section. The height of h of the notch in its radial direction being 10-50% of the height H of the block in said chamfered block which includes the height range of 25 to 50%. The chamfer block occupying 50 to 100% of the total number of blocks.

The chamfered blocks occupy 50 to 100% of the total number of blocks in accordance with claim 4; wherein and axial the blocks are defined by grooves in the circumferential and axial directions of the tire in accordance with claim 11; wherein the chamfered blocks have only one notch in accordance with claim 12; wherein the chamfered blocks

Art Unit: 3617

have a shape which is substantially rectangular, trapezoidal, substantially pentagonal, or elliptical when viewed from above as show in the drawings in accordance with claim 13.

Regarding using an angle of the notch of 30 to 60 degrees with respect to the upper surface of the block as recited in claim 1, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Takahiro to include the use of an angle of the notch of 30 to 60 degrees with respect to the upper surface of the block in his advantageous system as taught by Bridgstone, as tire block design is a common and everyday occurrence throughout the vehicle tire design art and the specific use of an angle of the notch of 30 to 60 degrees with respect to the upper surface of the block would have been an obvious matter of design expediency depending upon such factors as the loading to be carried by the tire, the yield strength of the rubber or elastomer material, the amount of stability one is targeted in the tire; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the tire which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

3. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daisei et al and Bridgstone (JP 2003-11617A) in view of Sumitomo (JP 11-245637 A).

Claims 7-8

Regarding using a land ratio of an inner side of the tire equator which is greater than that of a land ratio of an outer side of the vehicle or a land ratio of the inner side of the vehicle from the tire equator which is 1.1 to 1.5 times the land ratio of the outer side of

Art Unit: 3617

the vehicle as recited in claims 2-3, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Daisei et al to include the use of a land ratio of an inner side of the tire equator which is greater than that of a land ratio of an outer side of the vehicle or a land ratio of the inner side of the vehicle from the tire equator which is 1.1 to 1.5 times the land ratio of the outer side of the vehicle in his advantageous system as taught by Sumitomo, as tire aspect ratio design is a common and everyday occurrence throughout the vehicle tire design art and the specific use of a land ratio of an inner side of the tire equator which is greater than that of a land ratio of an outer side of the vehicle or a land ratio of the inner side of the vehicle from the tire equator which is 1.1 to 1.5 times the land ratio of the outer side of the vehicle would have been an obvious matter of design expediency depending upon such factors as the loading to be carried by the tire, the yield strength of the rubber or elastomer material, the amount of stability one is targeted in the tire; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the tire which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

Allowable Subject Matter

4. Claims 5-6, 10, 14-15, 17, 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Art Unit: 3617

5. Applicant's arguments filed 01/27/2005 have been fully considered but they are not persuasive.

A. Summary of applicant's argument.

In the amendment, the applicant traversed the rejection of the claims for the following reasons:

1. One of ordinary skill in the art would not combine the cited reference because an inoperable tire would be produced or the intended function of the cited references would be destroyed as Daisei '316 has a chamfering part provided in the outer side edge of the block in the tire axial direction which is directed outward of the vehicle to increase the cornering force. Also, the angle of the surface of the notch is required to be very low such as around 2 to 4 degrees. The JP '617 reference is different than Daisei '316 due to a chamfer having a smooth convex surface.
2. Improper combination of the Daisei '316 reference with JP 617 reference to form the instant rejection.

B. Response to applicant's argument.

In response to applicant's argument No. 1, it must be recognized that the rejection of the claims is drawn to modifying the Daisei '316 reference to include an angle of the notch of 30 to 60 degrees with respect to the upper surface of the block as recited in claim 1. Applicant's argument is drawn to the particular shape of the inclined surfaces of both references which are different (straight incline surface in Daisie '316 and convex incline surface in JP '617) rather than to the angle of the chamfer of both references which claim 1 is concerned about. It is factual and accurate that the JP '617

Art Unit: 3617

discloses a chamfered block (32) with "an inclined surface obtained by chamfering a corner between an upper surface of the block and a wall surface of the block on an outer side edge of the block which is directed outward of a vehicle when the tire is mounted on the vehicle" as recited in applicant claim 1. This is clearly shown in fig. 1 of the JP '617 patent and in the abstract. As explained in the rejection above, the specific use of an angle of the notch of 30 to 60 degrees with respect to the upper surface of the block would have been an obvious matter of design expediency. Also, regardless of the shape of the chamfer, the JP '617 patent discloses an angle of the inclined surface of the notch which is in the range of 30 to 60 degrees as seen in fig. 1 with respect to the upper surface of the chamfer blocks.

2. Applicant's argument No. 2 is not understood since the particular shape of the inclined surface of the JP '617 reference is not being incorporated into the Daisie '316 patent rather only the specific teaching of the angle of incline is used for the rejection. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching of an angle of an inclined surface greater than 30 degrees by the JP '617 reference establishes a *prima facie* case of obviousness to one of ordinary skill in the art. Also, the general concept of selecting a particular angle of a notch of a block in a tire constitutes an

Art Unit: 3617

obvious mechanical expediency and is well known in the art as illustrated by the JP '617 patent.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules
Examiner
Art Unit 3617

FFJ

April 15, 2005

FRANTZ F. JULES
PRIMARY EXAMINER

